

=====

Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Durreshwar Anjum

Timestamp: [year=2010; month=1; day=21; hr=14; min=7; sec=56; ms=639;]

=====

Application No: 10593659 Version No: 2.0

Input Set:

Output Set:

Started: 2010-01-07 10:36:57.806
Finished: 2010-01-07 10:37:00.641
Elapsed: 0 hr(s) 0 min(s) 2 sec(s) 835 ms
Total Warnings: 22
Total Errors: 0
No. of SeqIDs Defined: 22
Actual SeqID Count: 22

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (1)
W 213	Artificial or Unknown found in <213> in SEQ ID (2)
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (4)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
W 213	Artificial or Unknown found in <213> in SEQ ID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (7)
W 213	Artificial or Unknown found in <213> in SEQ ID (8)
W 213	Artificial or Unknown found in <213> in SEQ ID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 213	Artificial or Unknown found in <213> in SEQ ID (12)
W 402	Undefined organism found in <213> in SEQ ID (13)
W 402	Undefined organism found in <213> in SEQ ID (14)
W 402	Undefined organism found in <213> in SEQ ID (15)
W 402	Undefined organism found in <213> in SEQ ID (16)
W 402	Undefined organism found in <213> in SEQ ID (17)
W 402	Undefined organism found in <213> in SEQ ID (18)
W 402	Undefined organism found in <213> in SEQ ID (19)
W 402	Undefined organism found in <213> in SEQ ID (20)

Input Set:

Output Set:

Started: 2010-01-07 10:36:57.806
Finished: 2010-01-07 10:37:00.641
Elapsed: 0 hr(s) 0 min(s) 2 sec(s) 835 ms
Total Warnings: 22
Total Errors: 0
No. of SeqIDs Defined: 22
Actual SeqID Count: 22

Error code	Error Description
W 402	Undefined organism found in <213> in SEQ ID (21)
W 402	Undefined organism found in <213> in SEQ ID (22)

SEQUENCE LISTING

<110> Hardwick, James;
Dai, Hongyue;
Lamb, John R.
Sepp-Lorenzino, Laura;
Severino, Michael E.;
Zhang, Chunsheng

<120> Method and Biomarkers for Detecting
Tumor Endothelial Cell Proliferation

<130> 21412YP

<140> 10593659
<141> 2010-01-07

<150> PCT/US2005/009874
<151> 2005-03-24

<150> 60/556,645
<151> 2004-03-26

<160> 22

<170> FastSEQ for Windows Version 4.0

<210> 1
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 1
gacagagtcc gaatgcattc t

21

<210> 2
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 2
tgcccggtctg gagaaataacc

20

<210> 3
<211> 27
<212> DNA
<213> Artificial Sequence

<220>

<223> Probe

<400> 3

ccctgtgatt ctaaccatgg ctttctc

27

<210> 4

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 4

cggttttat caggctata ggat

24

<210> 5

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 5

tgtgggaggc aacacgattt

20

<210> 6

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Probe

<400> 6

tcaagaaatg gctgcctgca cccc

24

<210> 7

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 7

gaccgaaaacg tggctgtcta tc

22

<210> 8

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 8
gtgatgtgca ccgcata
20

<210> 9
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Probe

<400> 9
ccgctacttc cactggcg
22

<210> 10
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 10
aattgggctc ctgcac
18

<210> 11
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 11
ccaggtgctg cgagtt
19

<210> 12
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Probe

<400> 12
tggccccgcta caagttctac ctggct
27

<210> 13
<211> 2366
<212> DNA
<213> Rattus

<400> 13
agcctcagag caccgtctgt catcaatcca gtccttgcgt gtctgccggc ccccttggcc 60
cctgcagtca ccgaactgct gtcttagagag agcccagcgt cagtaccatg agagtctggc 120
ttgcgagcct gttcctctgc gccttggtg cgaactctga aggtggcagt gaacttgaag 180
cttctgtatga atcaaacttgt ggctgtcaga acggaggagt atgtgtgtcc tacaagtact 240

tctccagcat tcgaagatgc agctgcccaa agaaattcaa aggggagcac tgtgagatag 300
atacatcaaa aacctgtat catggaaatg gtcaatcta ccgaggaaag gccaatactg 360
acacccaaagg cccggcctgc ctggcctgga attcacccgc tgtccttcag caaacctaca 420
atgctcacag atccgatgct ctagcctag gcctgggaa acacaattac tgcaggaacc 480
ccgacaacca gaggcgaccc tggtgctatg tgcaaattgg cctaaagcag tttgtccaag 540
aatgcattgtt gcaggactgc tctctcagca aaaagccttc ttctactgtt gaccaacaag 600
gttccagtg tggccagaag gctctaaggc cccgctcaa gatcggtggg ggagaattca 660
ctgtcggtga gaaccagccc tggttgcag ccacatctaccc gaagaataag ggaggaagcc 720
ctccctcctt taaatgttgtt ggggacccca tcagtcctt ctgggtggcc agcgccacac 780
actgcttcgtt gaatcagcca aagaaggaag agtacgttgtt ctacctgggtt cagtcgaagc 840
ggaactccta taaccccgga gagatgaagt ttgaggttga gcaagctcatc ttgcacgaag 900
acttcagcga cgaaaactctg gcctccata atgacatagc ctgtgttgcag atacgttacca 960
gcacgggcca atgcgcacag ccacatccagga ccatacagac catctgcctt ccccccgggtt 1020
ttggtgatgc tccgttgtt tcagactgtt agatcactgg ctccggacaa gagagtgcac 1080
ctgactattt ctatccgaag gacctgaaaaa tgtcagttgtt aaagattatt tctcacgaac 1140
agtgcacagca gccccactac tatggctctg aaattaatta taaaatgttgc tttgtgtgt 1200
acccagatgtt gaaaaacagat tcctgtcgg gagattcagg aggacctt atctgttacca 1260
tcgatggtcg cccaaactctg agcgggattt tgagctgggg cagttggatgtt gcaagagaaaa 1320
acaaggctgg tgtctacacg agggctctcat acttcctgaa ctggatttgc tcccacattt 1380
gagaagagaa tggccatggcc ttctgttgtt ccccaaggca ctggggggaaag aaacggatgg 1440
gtcgccactc atccccacgc tgacccgttctt ctgcagcagg gtcacatcttca tcacgtggag 1500
ggaagagctg aagaaaacag gctctgcact gattcttgc ttgtgtgtc caccagggtt 1560
aacccttataa gtattaccctt cagacacagg tctgggtgtt ggcacatccag accatcttca 1620
ccaggatgga aatcaatctt gactcaagat gaatagatgg ggagttgtct ttttatggac 1680
taaagccatc tgcaagttaa aaacccaaatgtt gtaggaggag agttgggttcc cctaattgggt 1740
cattcatgag gtctgtgtt gggaaataaa tgattttccat attaggaatgtt gtaacagctg 1800
aggtattctg aggggtcttgc tccaaatatgtt gcaacatgtt gtaagagatg gagaactaa 1860
tggcttgagg gaacagttct tgcacccat gaggatgttca gggaaatattt tttgtgtgt 1920
catgtgcattt tttgtatgtt tgctgtgtt tgctgtgtt tggtgtgtc tttgtgtgtt 1980
tgctcaactgtt gcacagggtt gtagtataaaa tctgagcaaa gctgggtgtt tttgttatct 2040
actgcacatgtt ttttttttttccat gactgtgtt gtcacccat gggccatccat 2100
tgcacatgtt ttttttttttccat gactgtgtt gtcacccat gggccatccat 2160
tttactttttt atatagatgtt ttttttttttccat gactgtgtt gtcacccat 2220
taatttttttccat gactgtgtt gtcacccat gggccatccat ttttttttttccat 2280
attttataat ttttttttttccat gactgtgtt gtcacccat gggccatccat 2340
tgatcaatataa aatgtgttccat ttttttttccat gactgtgtt gtcacccat 2366

<210> 14

<211> 2360

<212> DNA

<213> Homo Sapien

<400> 14

acagtgcggga gaccgcagcc cccggagcccc ggccagggttcc cacctgtccc cgcagcgccc 60
gctcgccccc tcctggcgcac gcccacccggc cggcgcttagt cggccacccat 120
gagagccctg ctggcgccgc tggctctgtt cgtccctggc gtgagcgact ccaaaggcag 180
caatgaactt catcaagtccatc catcgaactg tgactgttca aatggaggaa catgtgtgtc 240
caacaaggatc ttctccaaca ttcaactgggttca aactgcccac aagaaattcg gagggcagca 300
ctgtgaaata gataagtcaa aaacctgttca tgagggaaat ggtcaactttt accggggaaa 360
ggccagcactt gacccatgg gcccggccctg cctggccctgg aactctgcca ctgtccttca 420
gcaaacgtac catgcccaca gatctgtatgc tcttcagctg ggccctggggaa aacataatta 480
ctgcagggaaac ccagacaacc ggaggcgacc ctggtgctat gtgcaggtgg gcctaaagcc 540
gcttgccttcaaa gatgtgttgc tgcatgactg cgcagatggaa aaaaaggccctt ccttccttcc 600
agaagaattt aaatttcaatgtt gttggccaaaaa gactctgttggggcccttca aatggatgg 660
ggggagaattt accaccatcg agaaccagcc ctggtttgcg gccatctaca ggaggcaccgg 720
ggggggggctt ctgttgcacccatcg tttgtgtggggcccttca aatggatggatgg 780
cgccacacacatc tgcttcatttgc attacccaaa gaaggaggac tacatgttgc acctgggtcg 840

ctcaaggctt aactccaaca cgcaagggga gatgaagttt gaggtggaaa acctcatcct 900
acacaaggac tacagcgctg acacgcgtgc tcaccacaac gacattgcct tgctgaagat 960
ccgttccaag gaggcaggt gtgcgcagcc atccggact atacagacca tctgcctgcc 1020
ctcgatgtat aacgatcccc agttggcac aagctgtgag atcactggct ttggaaaaga 1080
gaattctacc gactatctt atccggagca gctaaaaatg actgttgta agctgatttc 1140
ccaccggag tgtcagcagc cccactacta cggctctgaa gtcaccacca aaatgctgt 1200
tgctgctgac ccacagtggaa aacagattc ctgccaggaa gactcagggg gaccctcg 1260
ctgttccctc caaggccgca tgactttgac tggattgtg agctggggcc gtggatgtgc 1320
cctgaaggac aagccaggcg tctacacgag agtctcacac ttcttaccct ggatcccg 1380
tcacaccaag gaagagaatg gcctggccct ctgagggtcc ccagggagga aacgggcacc 1440
acccgcttc ttgctggtt tcattttgc agtagagtca tctccatcag ctgttaagaag 1500
agactggaa gataggtctt gcacagatgg atttgcctgt gccacccacc agggcgaacg 1560
acaatagctt taccctcagg cataggcctg ggtgctggct gcccagaccc ctctggccag 1620
gatggagggg tggctctgac tcaacatgtt actgaccagc aacttgtctt tttctggact 1680
gaaggctgca ggagtaaaaa agggcagggc atctccctgt catgggtgaa gggagagcca 1740
gctcccccgaa cggtgggcat ttgtgaggcc catggttgag aatgaataa tttcccaatt 1800
aggaagtgta acagctgagg tctcttgagg gagcttagcc aatgtgggag cagcggttt 1860
gggagcagag acactaacga cttcagggca gggctctgat attccatgaa tgtatcagga 1920
aatatatatg tggctgtatg ttgcacact tggctgtggg ctgtgagtgt aagtgtgagt 1980
aagagctggt gtctgattgt taagtctaaa tatttcctta aactgtgtgg actgtgatgc 2040
cacacagagt ggtcttctg gagaggatgat aggtcactcc tggggccctt tgggtcccc 2100
acgtgacagt gcctggaaat gtattattct gcagcatgac ctgtgaccag cactgtctca 2160
gtttcacttt cacatagatg tcccttctt ggccagttat cccttcctt tagccttagtt 2220
catccaatcc tcactgggtg gggtgaggac cactcctgta cactgaatat ttatattca 2280
ctatTTTtat ttatatttt gtaattttaa ataaaagtga tcaataaaaat gtgattttc 2340
tgatgaaaaaa aaaaaaaaaaa 2360

<210> 15
<211> 1857
<212> DNA
<213> Rattus

<400> 15
ctcaagctca cactggctgg acttcctcgc catgacagtc tgtacctcta actgatccca 60
gggatgatac cacctacatt tggggtggtt ctctcgccct cagttaaacc tctctggag 120
caccatcaca gacaccaca gaagttgtt ccctagatga ttcttaggtcc tggagttg 180
acaagattga ccatcagcgt ctcagcaatc gggtaagta aacaccacgg ttgtctccat 240
ggaaatgctt aactacggct tgcttagtaag gactccagac tccaaagagg ccacaccatg 300
aagattctcc tgctgtgtt ggcaactgctg ctgacctggg acaatggcat ggtcctggg 360
gagcaggagt tctctgacaa tgagctccaa gaactgtcca ctcaaggaag taggtatgtt 420
ataaaggaga ttcagaacgc cgtccagggg gtgaagcaca taaagaccct catagaaaaaa 480
accaacgcac agcgaagtc cctgctcaac agtttagagg aagccaaaaa gaagaaagag 540
ggtgccttag atgacaccag ggattctgaa atgaagctga aggcttccc ggaagtgtgt 600
aacgagacca tggatggccct ctgggaagag tggatggccct gcctgaagca cacctgcac 660
aagttctacg cacgcgtctg caggagcggc tgggggctgg ttggtcgcca gctagaggag 720
tttctgaacc agagctcacc ctctacttc tggatgaacg gggaccgcac cgactccctg 780
ctggagagtg accggcagca gagccaagtc cttagatgta tgcaggacag cttcactcgg 840
gcgtctggca tcatacatac gctttccag gaccggcttct tcacccatga gccccaggac 900
atccaccatt tctccccat gggcttccca cacaaggccgc ctcatattctt gtaccccaag 960
tcccgcctgg tccgcagcct catgcctctc tcccactacg ggcctctgag cttccacaac 1020
atgttccagc ctttcttga tatgatacac caggctcaac aggccatgga cgtccagctc 1080
catagcccaag ctttacagtt cccggatgtg gatttcttaa aagaaggtga agatgacccg 1140
acagtgtgca aggagatccg ccataactcc acaggatgcc tgaagatgaa gggccagtgt 1200
gagaagtgcc aagagatctt gtcgtggac tggctgacca acaatcctgc ccaggctaac 1260
ctgcgcagg agctaaacga ctgcgtccag gtcgtgaga ggctgaccca gcagtacaac 1320
gagctgcttc attccctcca gtcacaagatg ctcaacacct catccctgct ggaacagctg 1380
aacgaccagt tcacgtgggt gtcggcagctg gctaaccctca cacagggcga tgaccagtagc 1440

cttcgggtct ccacagtgc aaccattct tctgactcg aagtccctc tcgtgtca 1500
gaggtgtgg tgaagctgt tgactctgac cccatcacag tgggttacc agaagaagtc 1560
tccaaggata accctaagtt tatggacaca gtggcagaga aagcgctaca ggaataccgc 1620
aggaaaagcc gcatggaatg agacagaagg atcagtttc tatatgttagg agtctcaagg 1680
agggaatctc ccagcttcc gaggtgtctg cagaccctta gagaactcac atgtctccag 1740
cgcctaggcc tccaccccag cagcctctcc ttctgtactc taatgcctgc 1800
acttgatgct ctggaaagaa ctgcttcccc cacgcaacta atccaataaa gcacctt 1857

<210> 16
<211> 2859
<212> DNA
<213> Homo Sapien

<400> 16
cttcccgcc cattcttgg gctgtgagtca tgcagggttg cagccagccc caaagggggt 60
gtgtgcgcga gcagagcgct ataaatacgg cgcctccag tgcccacaac gcggcgctcg 120
caggaggagc gcgcgggcac aggggtgccgc tgaccgaggc gtgcaaagac tccagaattg 180
gaggcatgat gaagactctg ctgctgttg tggggctgct gctgacctgg gagagtggc 240
aggtcctggg ggaccagacg gtctcagaca atgagctca gggaaatgtcc aatcaggaa 300
gtaagtacgt caataaggaa attcaaaaatg ctgtcaacgg ggtgaaacag ataaagactc 360
tcatagaaaa aacaaacgaa gagcgcgaaga cactgctcg caacctagaa gaagccaaga 420
agaagaaaaga ggatgcccta aatgagacca gggaatcaga gacaaagctg aaggagctcc 480
caggagtgt caatgagacc atgatggcc tctgggaga gtgtaagccc tgcctgaaac 540
agacctgcac gaagttctac gcacgcgtct gcagaagtgg ctcaggcctg gttggccgccc 600
agctttaggaa gttcctgaac cagagctcgc ctttctactt ctggatgaat ggtgaccgca 660
tcgactccct gctggagaac gaccggcgc agacgcacat gctggatgtc atgcaggacc 720
acttcagccc cgcgtccagc atcatagacg agctctcca ggacaggttc ttccccggg 780
agccccagga tacctaccac tacctgcct tcagcctgccc ccacccggagg cctcacttct 840
tctttcccaa gtcccgcata gtccgcagct tgatgcctt ctctccgtac gagccctga 900
acttccacgc catgttccag cccttccttg agatgataca cgaggctcag caggccatgg 960
acatccactt ccatagcccc gccttccagc acccgccaaac agaattcata cgagaaggcg 1020
acgatgaccg gactgtgtgc cgggagatcc gccacaactc cacgggctgc ctgcggatga 1080
aggaccagtg tgacaagtgc cgggagatct tgtctgtgga ctgttccacc aacaaccct 1140
cccaggctaa gctggccgg gacgtcgacg aatccctca ggtcgctgag aggttgcacca 1200
ggaaatacaa cgagctgcta aagtctacc agtggaagat gctcaacacc tcctccttgc 1260
tggagcagct gaacgagcag ttaactggg tgtcccgct ggcacccctc acgcaaggcg 1320
aagaccagta ctatctgcgg gtcaccacgg tggcttccca cacttctgac tcggacgttc 1380
cttccggtgt cactgaggtg gtctgtgaagc tctttgactc tgatcccatc actgtgacgg 1440
tccctgtaga agtctccagg aagaacccta aatttatgga gaccgtggcg gagaaagcgc 1500
tgcaggaata ccccaaaaag caccgggagg agtgagatgt ggatgttgc tttgcaccta 1560
cggggggcata tgagtccagg tccccccaaatgagctgca gccccccaga gagagctctg 1620
cacgtcacca agtaaccagg ccccagccctc caggccccca actccgcccc gcctctcccc 1680
gctctggatc ctgcactcta acactcgact ctgctgtca tggaaagaaac agaattgctc 1740
ctgcacatgca ctaattcaat aaaactgtct tgtagctga tcgcttggag ggtccttctt 1800
ttatgtttagt ttgctgttcc cccggcatgcc ttcatggc tatggggggc aggcaggggg 1860
gatggaaaat aagttagaaac aaaaaagcag tggctaagat ggtataggga ctgtcatacc 1920
agtgaagaat aaaagggtga agaataaaaag ggatatgtg acaaggtga tccacttcaa 1980
gaattgctt cttcaggaa gagagatgtg tttcaacaag ccaactaaaa tatattgctg 2040
caaatggaaag cttttctgtt ctattataaa actgtcgatg tattctgacc aagggtgcac 2100
aatctctaa aggaatacac tggaaagttaa ggagaagaat cagtaagtgt aaggtgtact 2160
tggtagtata atgcataatt gatgtttcg ttatggaaac atttggtgcc cagaagtcca 2220
aattatcagt ttatgtttagt agagcttattg ctttgcagc ggttttattt gtaaaagctg 2280
ttgatgttca gttgttagag ctcagcatcc caggggcata ttttgcactg tggcatttcc 2340
tgtccaccgc cgggttatat gatttcata ctttccctg gaccacaggc gtttctccggc 2400
tttttagtctg aaccatagct gggctgcagc accctacgct gccagcagggt ggccatgact 2460
acccgtggta ccaatctcg tcttaaagct caggctttc gttcattaaac attctctgat 2520
agaattctgg tcatcagatg tactgcaatg gaacaaaact catctggctg catccagggt 2580

gtgttagcaaa gtccacatgt aaatttatag cttagaataat tcttaagtca ctgtcccttg 2640
tctctctttg aagtataaa caacaaactt aaagcttagc ttatgtccaa ggtaagtatt 2700
ttagcatggc tgtcaaggaa attcagagta aagtcagtgt gattcactta atgatataca 2760
ttaattagaa ttatgggtc agaggtattt gcttaagtga tcataattgt aaagtataatg 2820
tcacattgtc acattaatgt caaaaaaaaaaaaaaaa 2859

<210> 17

<211> 2018

<212> DNA

<213> Rattus

<400> 17

ccccgagcga actgctgagg atccgctgtc tggcattctc tcagcctttt gtccgagcca 60
gagctgcatt cagaggagag aggcccccta aggagcagct ggactcctgc tgcgagccga 120
aagcccccta aggcagttga ggacctggga aggaggctcc ctgctggtgg cgcttctcct 180
ggtgcctcca atccgtgcga gactgaaaac ggcggagcgg ctacggact ctcacaggag 240
caagctgcaa catgaatcg tccgcaagcc ggtgcggacg cgccctgggtg gcgctgctgc 300
tggcctgtgg ctgtgtgggg gtatggggag agaaaagagg attcccacct gcccagggcca 360
caccatctct tctcggact aaagaagtta tgacgcacc cactaagacc tcctggacta 420
gaggttccaa ctccagtcg atgcgttcct ccgcacctgc ggaggtgacc aaaggaggga 480
gggtggctgg agtccgcaca agatccctcc ctccctccgtg ccaacgaaaa attgagatca 540
acaagacttt taaatacata aacacgattt tatcatgcct cgtgttcgtg cttaggcata 600
tcgggaactc cacactgcta agaatcatct acaagaacaa gtgcata gataatggtccca 660
atatcttcat cggccacccgcgt gctctggag atctgtaca catcatcatc gacattccca 720
ttaatgccta caagctgctg gcaggggact ggccatttgg agctgagatg tgcaagctgg 780
tgcccttcat acagaaggct tctgtgggg tcacagtgtt gagttctatgt gctctaagta 840
ttgacagata tcgagctgtt gcttcttggaa gtcgaattaa aggaattggg gttccaaaat 900
ggacagcagt agaaattgtt ttaatttggg tggtctctgt ggttctggct gtccctgaag 960
ccataggttt tgatgtgatt acgtcgact acaaaggaaa gcccctaagg gtctgcata 1020
ttaatccctt tcagaaaaca gccttcatgc agtttacaa gacagccaaa gactgggtggc 1080
tgttcagttt ctactctgc ttgccgttag ccatcactgc gatctttac accctaata 1140
cctgtgagat gctcagaaag aaaaagtggta tgcaaggatgc ctgttttgc cacttaaagc 1200
agagacgaga agtggccaag acagtattct gcctggctt cgtgtttgcc ctctgttggc 1260
ttccccctca cctcagcagg attctgaagg tcaccctta tgaccagagc aatcctcaga 1320
ggtgtgaact tctgagttt ttgctggttt tggactacat tggtatcaac atggcttctt 1380
tgaattcctg cattaatcca atcgctctgt atttggtgag caagagattc aaaaactgct 1440
ttaagtctgt ttgtgtctgc ttgtgtccaaa cgtttgagga aaaacagtcc ttagaggaga 1500
agcaatcctg ttgtgtccaaa aaagctaacc atcacggata cgacaaacttc cgctccagca 1560
ataaatacag ctcatcttgc aggaaggaac actcaactgaa tctcattgtc ctcatcgat 1620
acagatagca ttaaaacaaa atgaaacacc ttgtgtccaaa aaacggaaaa ccgtgcttgc 1680
gaaaaagggtgt gcacgcatttgg gaaggggatt gtttttaac cgttctact ttccacaccc 1740
gatatttccac gggctgttta caacctaaga aagccatggg aatgaatgaa gcctcgaa 1800
agcactttaga ttcttagtca gcacttcagg acggcttta aaagccctca ctgcactcac 1860
agcccaactta cattaaaaaa caagaactca aactctattc aggggtttat tatccagtcc 1920
tatgaatctg gatacaggaa tgcatgacat tgcaaaacaa ttcttaaagc aaagttcaa 1980
ttgctcgatt tgagacaaaa aacaaaacaa aaaaaaaaaaaaaaaa 2018

<210> 18

<211> 4286

<212> DNA

<213> Homo Sapien

<400> 18

gagacattcc ggtgggggac tctggccagg ccgagcaacg tggatcctga gagcactccc 60
aggtaggcat ttgccccgggt gggacgcctt gccagagcag tggatggcag gccccctgg 120
aggatcaaca cagtggctga acactggaa ggaactggta cttggagatct ggacatctga 180
aacttggctc tgaaactgctg cagcggccac cggacgcctt ctggagcagg tagcagcatg 240

cagccgcctc caagtctgtg cgacgcgc ctggttgcgc tggttcttgc ctgcggcctg 300
tcgcggatct ggggagagga gagaggcttc cgcctgaca gggccactcc gcttttgc aa 360
accgcagaga taatgacgcc acccactaag accttatggc ccaagggttc caacgccagt 420
ctggcgccgt cgttggcacc tgccggagggtg cctaaaggag acaggacggc aggatctccg 480
ccacgcacca tctccctcc cccgtgccaa ggaccatcg agatcaagga gactttcaaa 540
tacatcaaca cggttgtgtc ctgccttgc ttcgtgtgg ggatcatcg gaactccaca 600
cttctgagaa ttatctacaa gaacaagtgc atgcgaaacg gtcccaatat ctgatcgcc 660
agcttggctc tgggagacct gctgcacatc gtcattgaca tccttatcaa tgtctacaag 720
ctgctggcag aggactggcc atttggagct gagatgtgt a gctggtgcc tttcatacag 780
aaaggctccg tggaatcac tgtgctgagt ctatgtgtc tgagtattga cagatatcga 840
gctgttgctt cttggagtag aattaaagga attgggttc caaaaatggac agcagtagaa 900
attgttttga ttgggtgggt ctctgtggtt ctggctgtcc ctgaagccat aggtttttagt 960
ataattacga tggactacaa aggaagttat ctgcgaatct gcttgcttca tcccgttcag 1020
aagacagctt tcatgcagtt ttacaagaca gcaaaaga